Stroke Death Rates, Age-Adjusted
Clark County and Washington State, 1994 through 2001

Why we should care?

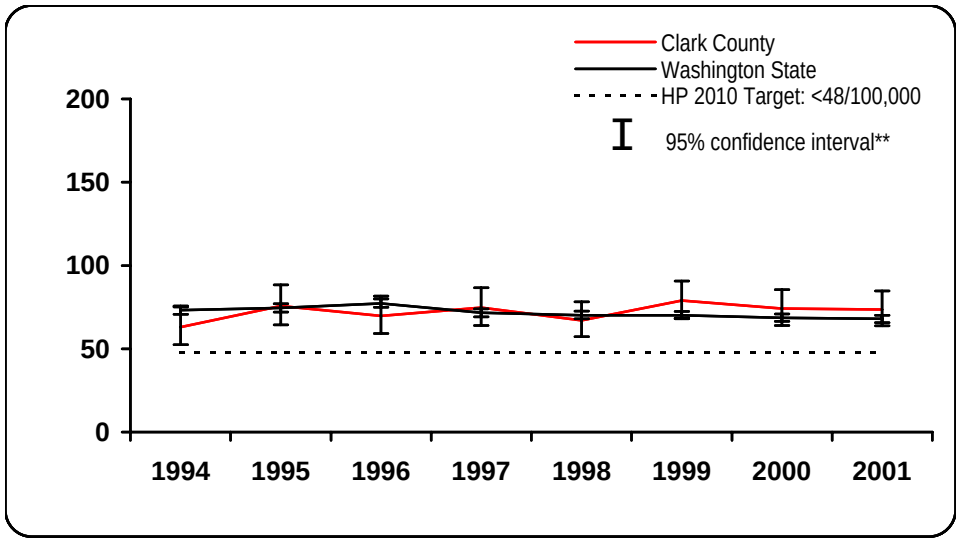
Stroke is the third leading cause of death as well as a leading cause of disability in Washington state as well as nationwide. (1) Washington state is one of 12 states in the nation with the highest stroke mortality rates. (1) Stroke-related hospital charges in Washington state in 1999 totaled over $137 million.(1) Fifteen to 30% of stroke survivors suffer permanent disabilities.(1)

Status

- The stroke death rate in Clark County has ranged from 63 to about 79 deaths per 100,000 population between 1994 and 2001. (2,3)
- Clark County rates have been very similar to those of Washington State.
- Since 1994, neither the statewide rates nor the county rates have met the Healthy People 2010 target of 48 stroke deaths per 100,000 or lower.(2,3)

What we can do

- Some risk factors for stroke such as age, gender, race and heredity cannot be changed.
- High blood pressure or hypertension is associated with an increased risk for stroke.(1)
- Abstaining from tobacco use is also an effective way to reduce a person's risk of having a stroke. Smokers are more than twice as likely to suffer from stroke as non-smokers. (1)



	Clark County			Washington State		
Year	Rate*	95% CI**	Number	Rate*	95% CI**	Number
1994	63.0	(52.4, 75.1)	127	73.1	(70.7, 75.7)	3,318
1995	75.7	(64.4, 88.4)	162	74.6	(72.1, 77.1)	3,482
1996	69.8	(59.3, 81.7)	158	77.3	(74.9, 79.8)	3,737
1997	74.6	(63.9, 86.7)	174	71.6	(69.3, 74.0)	3,561
1998	67.1	(57.2, 78.2)	166	70.2	(67.9, 72.6)	3,605
1999	78.9	(68.3, 90.7)	200	70.2	(68.0, 72.5)	3,705
2000	74.1	(64.0, 85.4)	193	68.6	(66.4, 70.8)	3,709
2001	73.6	(63.7, 84.6)	199	67.9	(65.8, 70.2)	3,760

Please see reverse side for technical notes and sources.

Technical notes:

Rates:

-Much of public health assessment involves describing the health status of a defined community by looking at changes in the community over time or by comparing health events in that community to events occurring in other communities or the state as a whole. In making these comparisons, we need to account for the fact that the number of health events depends in part on the number of people in the community. To account for growth in a community or to compare communities of different sizes, we usually develop rates to provide the number of events per population unit. The following rates are most commonly used:

- Crude mortality rates, or death rates, are calculated by dividing the number of deaths due to a certain cause by the population in which the deaths are occurring in a specified period of time such as one year.

-Age-adjusted death rates are calculated to allow comparisons of death rates between two populations at the same time or the same population at different times. The age-adjustment process removes differences in the age composition of two or more populations to allow comparisons between these populations independent of their age structure.

- Incidence is a way of measuring the risk of a disease in a population. An incidence rate is calculated by dividing the number of new cases of a disease by the population in which the disease is occurring in a defined period of time (e.g. one year) and multiplying this number by 100,000.

Other technical notes:

- * Rate per 100,000 deaths adjusted using the 2000 U.S. Standard Population; deaths coded using ICD 10.
- ** 95% confidence intervals around the death rate; if the confidence intervals for state and county overlap in a given year, there isn ot significant difference between the rates.

Sources:

(1) Washington State Department of Health. *Health of Washington State* . Olympia, WA, 2002 Aug [cited 2003, May 13] 418p. Available from http://www.doh.wa.gov/HWS. (2) *Vital Registration System, Annual Statistics Files, Deaths 1980-2001* . [Data file]. Olympia, WA: Washington State Department of Health, Center for Health Statistics. (3) Public Health Seattle & King County, Epidemiology, Planning & Evaluation. (1991-2003). *VistaPHw* (Version 3.1.1) [Computer software for public health assessment]. Seattle, WA.